



A.D. 1842 . . . . . N° 9240.

S P E C I F I C A T I O N

OF

HENRY BENJAMIN AND HENRY GRAFTON.

PRESERVING ANIMAL AND VEGETABLE  
MATTERS.

L O N D O N :

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BENJAMIN AND GRAFTON'S SPECIFICATION.

TO ALL TO WHOM THESE PRESENTS SHALL COME, we, HENRY BENJAMIN, of Saint Mary at Hill, in the City of London, Fish Factor, and HENRY GRAFTON, of Chancery Lane, in the County of Middlesex, Philosophical Instrument Maker and Machinist, send greeting.

5    WHEREAS Her present most Excellent Majesty Queen Victoria, by Her Letters Patent under the Great Seal of Great Britain, bearing date at Westminster, the Twenty-seventh day of January, in the fifth year of Her reign, did, for Herself, Her heirs and successors, give and grant unto us, the said Henry Benjamin and Henry Grafton, Her especial licence, full power, sole pri-  
10    vilege and authority, that we, the said Henry Benjamin and Henry Grafton, our exors, admors, and assigns, or such others as we, the said Henry Benjamin and Henry Grafton, our exors, admors, or assigns, should at any time agree with, and no others, from time to time and at all times during the term of years therein expressed, should and lawfully might make, use, exercise, and  
15    vend, within England, Wales, and the Town of Berwick-upon-Tweed, our Invention of "IMPROVEMENTS IN PRESERVING ANIMAL AND VEGETABLE MATTERS;" in which said Letters Patent is contained a proviso that we, the said Henry Benjamin and Henry Grafton, or one of us, shall cause a particular description of the nature of our said Invention, and in what manner the same is to be  
20    performed, to be enrolled in Her said Majesty's High Court of Chancery within six calendar months next and immediately after the date of the said in part recited Letters Patent, as in and by the same, reference being thereunto had, will more fully and at large appear.



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*Benjamin and Grafton's Impts. in Preserving Animal and Vegetable Matters.*

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NOW KNOW YE, that in compliance with the said proviso, we, the said Henry Benjamin and Henry Grafton, do hereby declare that the nature of our said Invention, and the manner in which the same is to be performed, are fully described and ascertained in and by the following statement thereof (that is to say):—

Our Invention relates to preserving of animal and vegetable matters by freezing or cooling them by the aid of freezing mixtures; and in order that our Invention may be fully understood and readily carried into effect we will describe the means pursued by us; and as our Invention is particularly applicable to preserving fish, we will first describe the means we pursue for preserving fish according to our Invention. The fish intended to undergo the process is subjected to a freezing mixture composed of ice, pulverized and mixed with common salt; and we use for such mixture about one part of salt and six parts of ice; and when such fish has undergone the process, and has become completely frozen, it will remain preserved. We place the fish intended to be frozen in a copper or other metallic vessel, and fill up with cold water, and the vessel containing the fish and water is deposited in a mixture of pulverized ice and salt, as before mentioned; the said mixture being in a wooden trough. The fish, thus prepared, may be kept in a pure state for a considerable length of time, by the application of the freezing mixture in order to keep the same frozen. In those cases where the fish is only required to be kept preserved for a short time I employ freezing mixtures to cool the air of a close room, made of brick or other suitable material, sufficiently excluding the heat of the sun; and the fish to be preserved being placed in such room or chamber, in baskets or on slabs, we cause the air to circulate against the surfaces of metal vessels containing freezing mixtures, by means of revolving fans or other suitable means within the room or chamber, the object being to keep the air of the room in constant movement, by which it will be found that the moisture taken up by the air will, from time to time, become frozen on the surfaces of the metal vessels containing the freezing mixture; and the same must be brushed off continually, in order to keep the surfaces clean, as the frost on the vessels would otherwise retard the effect of cooling the circulating air. By this arrangement the fish will be kept cool, and preserved; and if it has been previously frozen, as before described, the keeping it in a room or chamber, as here described, would retain it in a frozen state. In preserving meat or vegetables, we treat those matters in the same manner as described for fish; and it only remains to be stated, that although we have only described ice and salt in particular quantities, we do not confine ourselves thereto, as salt may be used in larger or smaller quantities; in respect to the ice, the



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larger quantities of salt encreasing the degree of cooling effect. And we would state that, although we prefer ice and salt as the freezing means, we do not confine ourselves thereto, as other well-known freezing mixtures may be resorted to ; at the same time we would have it understood that we make no  
5 claim to such freezing mixtures, when separately considered, but only their use and application for freezing or cooling animal and vegetable matters to preserve them. And we would state, that we are aware that ice alone has been used for cooling animal matters to preserve them ; but, when alone, ice is of comparatively little use ; we do not therefore claim the use of ice when  
10 uncombined with other material or materials for obtaining a freezing mixture.

In witness whereof, I, the said Henry Grafton, have hereunto set my hand and seal, this Twenty-seventh day of July, in the year of our Lord One thousand eight hundred and forty-two.

HENRY (L.S.) GRAFTON.

15 AND BE IT REMEMBERED, that on the Twenty-seventh day of July, in the year of our Lord 1842, the aforesaid Henry Grafton came before our said Lady the Queen in Her Chancery, and acknowledged the Specification aforesaid, and all and every thing therein contained and specified, in form above written. And also the Specification aforesaid was stamped according to the  
20 tenor of the Statute made for that purpose.

Inrolled the Twenty-seventh day of July, in the year of our Lord One thousand eight hundred and forty-two.

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